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**Mathildoidea (Gastropoda, Heterostropha) from the
Late Triassic St Cassian Formation**

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In the St Cassian fauna of Late Triassic (Early Carnian) age gastropods with protoconch coiled in opposite direction to the teleoconch are common and belong to a number of quite different taxa. Twenty nine of these are here described, 11 of them for the first time: *Promathilda misurinensis* sp. nov., *Turrithilda cassiana* sp. nov., *T. dockeryi* sp. nov., *Tirolthilda seelandica* gen. et sp. nov., *T. nuetzeli* sp. nov., *Tofanella cancellata* sp. nov., *Cristalloella cassiana* gen. et sp. nov., *C. sinuata* sp. nov., *C. delicata* sp. nov., *Stuorilda cassiana* gen. et sp. nov., and *S. tichyi* sp. nov. All are newly defined and placed in the Mathildoidea. This connects the Triassic species of that superfamily with the modern Heterostropha (= Heterobranchia). In the family Mathildidae the genera *Mathilda* and *Promathilda* are differentiated, two species of *Turrithilda* described, and *Tirolthilda* and *Schroederilda* are included as new genera, with the type species *T. seelandica* gen. et sp. nov. and *Pseudotrionium millierense* Zardini, 1978, respectively. The new family Anoptychiidae holds the genera *Anoptychia*, *Turristylus* and *Camponella* gen. nov. (type species *Coelostylina pianozensis* Zardini, 1985). Here the juvenile ornament resembles that of the Mathildidae but differs from the later smooth teleoconch. Protoconch morphology differentiates the new families Tofanellidae, Trachoeidae and Ampezzanildidae. In contrast to the Mathildidae, Dolomitellidae and Anoptychiidae, the sinistral shell of the protoconch changes its direction of coiling within the larval part of the shell and not at the transition from larval shell to teleoconch. The Trachoeidae with the genera *Trachoeus* and *Vallandroella* gen. nov. (type species *Tyrsoecus antorni* Zardini, 1985) have a fusiniform shell. The Tofanellidae, with the genera *Tofanella* gen. nov. (type species *Turritella decussata* von Münster, 1841), *Cristalloella* gen. nov. (type species *C. cassiana* gen. et sp. nov.) and *Camponaxis* gen. nov. [type species *Cerithium* (?) *lateplicatum* Klipstein, 1843], differ from the Ampezzanildidae, with the genera *Ampezzanilda* gen. nov. (type species *Promathildia aialensis* Zardini, 1980), *Cassianilda* gen. nov. (type species *Turritella margaritifera* von Münster, 1841) and *Stuorilda* gen. nov. (type species *S. cassiana* gen. et sp. nov.), by the ornament of their protoconch. A key differentiates all described species, and the evolutionary history of the group is discussed.

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